

CALL OVERRIDE FEATURE FOR MOBILE PHONES

BACKGROUND OF INVENTION

[0001] The advent and proliferation of mobile phones has provided mobile phone users with a great deal of flexibility in telecommunications. Users can remain in contact with others without having to be near a fixed landline. Mobile phones afford many users a level of comfort that they can be contacted in emergency situations if necessary. This is especially comforting to parents that have left their children in the care of a babysitter. A situation that has not been addressed to date, however, is contacting a mobile user that is not answering their mobile phone. For instance, parents may be worried about elderly relatives or even teenage children if they fail to answer their mobile phone when called. In such cases, the caller may become worried that there is a physical reason that the called party can not answer their mobile phone. The mobile user may require assistance and not have the ability to contact someone.

[0002] What is needed is a means for establishing a connection when calling a mobile phone even if the user does not specifically answer the call.

SUMMARY OF INVENTION

[0003] The present invention describes a method of automatically answering a mobile phone. A mobile phone receives an incoming call and detects the calling party's phone number using a caller ID function. The mobile phone then determines if the calling party's phone number has been flagged as a phone number capable of causing the mobile phone to answer itself. If it is, the mobile phone automatically answers the call.

[0004] The mobile phone answers itself only after a pre-set number of rings giving the user time to answer the call on their own. To determine if the mobile phone should answer itself, the calling party's phone number is checked against a list or table in the mobile phone's memory, a server, or other location that contains one or more phone number entries. These entries have been identified as incoming calling phone numbers capable of causing the mobile phone to answer itself. In another implementation, the mobile phone's contact/phonebook entries are accessed to determine if the incoming phone number matches a phone number in the mobile phone's internal phonebook. If a match is found, it is determined whether an override flag or other detection means has been set for the phone number. The override flag is capable of causing the mobile phone to answer itself.

[0005] In another embodiment, the mobile phone receives a call. If the call is not answered within a pre-set number of rings it is diverted to a voice mail feature. The voice mail feature monitors the keypad entries input by the calling party. If the keypad entries input by the calling party match a pre-set code, then control of the call is returned to the mobile phone which automatically answers the call.

BRIEF DESCRIPTION OF DRAWINGS

[0006] FIG. 1 is a flowchart detailing the steps of the method of the present invention as well as the functions of any software used to implement the present invention.

DETAILED DESCRIPTION

[0007] The present invention can be implemented by software within the mobile phone that can automatically answer the phone and establish a connection when certain originating phone numbers place a call to the mobile phone. This feature can be particularly useful to check up on mobile phone users such as the elderly or children. Caregivers may wish to check up on an elderly relative when they are not with them. This feature enables the mobile phone to establish a call even if the mobile phone user has not answered. The caller can then listen for activity to try to determine if there is a situation that needs specific attention. In addition, if the mobile phone is equipped as a speakerphone, the caller can project their voice into the room to try to establish contact with the mobile phone user. If the mobile phone user answers back, the caller can assess whether everything is alright or if the mobile phone user requires further assistance.

[0008] FIG. 1 is a flowchart detailing the logic flow for the present invention. The first step in the process is for the mobile phone to detect an incoming call 105. The originating phone number is then determined 110 using a "caller ID" function before the mobile begins alerting of the call.

[0009] Caller ID provides the mobile phone user a visual indicator of who is calling in the form of an originating phone number in the mobile's display. Typically, if the mobile phone user wishes to screen her calls, she can simply not answer the call based on the incoming phone number. While caller ID merely provides the incoming phone number, other features of the mobile phone can utilize that information to enhance the user experience.

[0010] For instance, caller ID data can be matched against the mobile phone's contact data. If there is a match, the mobile phone can display the name of the incoming caller as it is entered in the contact database as opposed to the incoming phone number. Seeing the name "Jane" on your display is often more informative and intuitive than seeing "555-1234" and trying to figure out whose number it is. In addition, many mobile phones can display images. The images can also be linked to contacts in the database. Thus, if "Jane" calls and there is a picture linked to her contact data, her picture will appear in the display instead of a name or number. The present invention uses the caller ID number data as the basis for another added value feature associated with the mobile phone.

[0011] The incoming phone number is then checked 115 to see if it has been classified as an override number. If it is an override number, then the mobile phone determines if the override feature is enabled or disabled 118. If disabled, the call will be re-directed to a voice mail service. If enabled, the mobile phone will answer itself 120 after a certain number of rings rather than be directed to voice mail. Once answered, a full duplex call connection is established 125. Moreover, if the mobile phone has a speakerphone capability, the caller can speak and his voice will be projected into the area surrounding the mobile phone.

[0012] If the incoming number is not an override number the call is processed normally 130. If the call is not answered after a certain number of rings it will likely be directed to a voice mail service 135. There is an additional opportunity to implement the override feature. The mobile phone user can